World Journal of
Urology
Official Journal of the
Urological Research Society

Volume 4, 1986

Editors-in-Chef

U. Jonas
Afdeling Urologie
Academisch Ziekenhuis
Rijnsburgerweg 10
NL-2333 AA Leiden
The Netherlands

R. J. Krane
Boston University
University Hospital
Department of Urology
75 East Newton Street
Boston, MA 02118, USA

Editors

P. H. Abrams, Westbury on Trym., Bristol
R. Ackermann, Düsseldorf
O. Alfthan, Helsinki
G. Bartsch, Innsbruck
L. Boccon-Gibod, Paris
W. J. Catalona, St. Louis
D. S. Coffey, Baltimore
B. L. R. A. Coolsaet, Utrecht
M. J. Droller, New York
W. R. Fair, New York
J. M. Fitzpatrick, Dublin
A. Fritjofsson, Uppsala
R. Ghanadian, London
M. A. Ghoneim, Mansoura
D. Griffith, Houston
R. Hartung, Essen
R. Hautmann, Ulm
Y. Hirao, Nara
G. H. Jacobi, Mainz
T. Kakizoe, Tokyo
D. de Klerk, Cape Town
P. H. Lange, Minneapolis
L. I. Lipshultz, Houston
M. Marberger, Wien
C. A. Olsson, New York
D. F. Paulson, Durham
M. Pavone-Macaluso, Palermo
P. Ransley, London
M. I. Resnick, Cleveland
R. Schmidt, San Francisco
F. H. Schröder, Rotterdam
C. Schulman, Bruxelles
Th. Senge, Herne
M. S. Soloway, Memphis
E. D. Vaughan Jr., New York
R. deVere White, Sacramento
H. J. de Voogt, Amsterdam
A. J. Wein, Philadelphia

Springer-Verlag Berlin Heidelberg New York Tokyo

Copyright
Submission of a manuscript implies: that the work described has not been published before (except in the form of an abstract or as part of a published lecture, review, or thesis); that it is not under consideration for publication elsewhere; that its publication has been approved by all coauthors, if any, as well as by the responsible authorities at the institute where the work has been carried out; that, if and when the manuscript is accepted for publication, the authors agree to automatic transfer of the copyright to the publisher; and that the manuscript will not be published elsewhere in any language without the consent of the copyright holders.
All articles published in this journal are protected by copyright, which covers the exclusive rights to reproduce and distribute the article (e.g., as offprints), as well as all translation rights. No material published in this journal may be reproduced photographically or stored on microfilm, in electronic data bases, video disks, etc., without first obtaining written permission from the publisher.
The use of general descriptive names, trade names, trademarks, etc., in this publication, even if not specifically identified, does not imply that these names are not protected by the relevant laws and regulations.
While the advice and information in this journal is believed to be true and accurate at the date of its going to press, neither the authors, the editors, nor the publisher can accept any legal responsibility for any errors or omissions that may be made. The publisher makes no warranty, express or implied, with respect to the material contained herein.

Special regulations for photocopies in the USA: Photocopies may be made for personal or in-house use beyond the limitations stipulated under Section 107 or 108 of U.S. Copyright Law, provided a fee is paid. This fee is US $0.20 per page, or a minimum of US $ 1.00 if an article contains fewer than five pages. All fees should be paid to the Copyright Clearance Center, Inc., 21 Congress Street, Salem, MA 01970, USA, stating the ISSN 0724-4983, the volume, and the first and last page numbers of each article copied. The copyright owner's consent does not include copying for general distribution, promotion, new works, or resale. In these cases, specific written permission must first be obtained from the publisher.
Other regulations: Authors publishing in this journal can, under certain conditions, benefit from library and photocopy fees collected by VG WORT. Authors resident in the Federal Republic of Germany or in West Berlin can apply to Verwertungsgesellschaft WORT, Abteilung Wissenschaft, Goethestraße 49, D-8000 München 2, for detailed information.

Printers
Druckerei Winter, D-6900 Heidelberg

Springer-Verlag Berlin Heidelberg New York Tokyo
© Springer-Verlag GmbH & Co. KG, Berlin Heidelberg 1986
Printed in Germany

Contents

Incontinence

Editors: U. Jonas, R. J. Krane

U. Jonas, R. J. Krane
Editorial 1

P. Abrams, J. G. Blaivas, S. L. Stanton, J. T. Andersen, C. J. Fowler, T. Gerstenberg, K. Murray
Sixth report on the standardisation of terminology of lower urinary tract function. Procedures related to neurophysiological investigations: Electromyography, nerve conduction studies, reflex latencies, evoked potentials and sensory testing 2

E. Versi, L. Cardozo, J. Studd, D. Cooper
Evaluation of urethral pressure profilometry for the diagnosis of genuine stress incontinence 6

C. E. Constantinou
Determinants of cure by endoscopic suspension of the bladder neck in the incontinent female patient 10

J. Ouslander, D. Staskin, S. Orzeck, J. Blaustein, S. Raz
Diagnostic tests for geriatric incontinence 16

S. Plevnik, D. B. Vodušek, P. Vrtačnik, J. Janež
Optimization of pulse duration for electrical stimulation in treatment of urinary incontinence 22

S. Plevnik, J. Janež, P. Vrtačnik, B. Tršinar, D. B. Vodušek
Short-term electrical stimulation: home treatment for urinary incontinence 24

P. L. Venema, A. E. J. L. Kramer
Treatment of female incontinence with or without urethral instability 27

J. Kielmann, E. Lykkegaard Nielsen, C. Frimodt-Møller, T. Bonnesen, S. Mortensen
The levator-muscle repair: A new method in the treatment of female urinary incontinence 32

L. Mouritsen, J. H. Petersen, K. Folke, C. Frimodt-Møller, A. Berget
Colposuspension compared with levator ani muscle repair for correction of female stress urinary incontinence 38

T. Hald
Artificial sphincter 41

A. R. Mundy
The surgical approach to the treatment of incontinence due to drug resistant detrusor instability with particular reference to 'clam' ileocystoplasty 45

Infertility

Editors: G. Bartsch, R. deVere White

G. Bartsch
Male infertility: editorial comment 63

K. Scheiber, A. Schmassmann, H. P. Rohr, P. J. Oefner, M. Gotwald, G. Bartsch
Spermiometrics: the method and its clinical application 65

A. D. Deitch, S. D. Goldberg, R. W. deVere White
Flow cytometric analysis of testicular tissue: Detection of injury and recovery 71

E. L. Lewis, J. W. Overstreet
Immunologic infertility in the male 77

J. B. Murphy, L. I. Lipshultz, S. M. VerVoort
Review: Infertility in the spinal cord injured male 83

D. G. Kaufman, H. M. Nagler
The varicocele: Concepts of pathophysiology – present and future 88

P. C. Ryan, J. M. Fitzpatrick
Experimental testicular torsion: Do spermatozoal autoantigens cause immunological activation? 92

K. Scheiber, P. J. Oefner, G. Bartsch
Cryptorchidism and fertility 100

R. D. McClure
Microsurgery of the male reproductive system 105

Controversy in prostatic cancer

Editor: F. H. Schroeder

F. H. Schroeder
Editorial 127

D. F. Paulson
Management of locally advanced prostatic carcinoma by surgery: does screening for prostatic cancer make sense? 129

H. Yamabe, F. J. W. ten Kate, M. P. W. Gallee, F. H. Schroeder, K. Oishi, K. Okada, O. Yoshida
Stage A prostatic cancer: a comparative study in Japan and the Netherlands 136

R. J. L. H. Bosch, F. H. Schroeder
Current problems in staging and grading prostatic carcinoma with special reference to T3 carcinoma of the prostate 141

F. J. W. ten Kate, M. P. W. Gallee, P. I. M. Schmitz, A. C. Joebsis, R. O. van der Heul, M. E. F. Prins, J. H. M. Blom
Problems in grading of prostatic carcinoma: interobserver reproducibility of five different grading systems 147

R. Oosterom, B. Leijnse, J. Bogdanowicz, F. H. Schroeder
Evaluation of an enzyme-immunoassay for prostatic acid phosphatase utilizing monoclonal antibodies 153

P. J. Carpentier, F. H. Schroeder, P. I. M. Schmitz
Transrectal ultrasonometry of the prostate: the prognostic relevance of volume changes under endocrine management 159

G. Egender, A. Furtschegger, W. Schachtner, E. Pirker, G. Bartsch
Transrectal ultrasonography in diagnosis and staging of prostatic cancer 163

M. R. G. Robinson, J. Hetherington
The EORTC studies: is there an optimal endocrine management for M1 prostatic cancer? 171

W. G. Jones, A. V. Bono, A. Verbaeys, M. de Pauw, R. Sylvester, and members of the EORTC Genito-Urinary Tract Cancer Co-operative Group
Can the primary tumour be used as the sole parameter for response in phase II chemotherapy studies in metastatic prostate cancer? An EORTC Genito-Urinary Group Report 176

W. G. Jones, S. D. Fossa, A. V. Bono, J. J. Croles, G. Stoter, M. de Pauw, R. Sylvester, and members of the EORTC Genito-Urinary Tract Cancer Co-operative Group
Mitomycin-C in the treatment of metastatic prostate cancer: report on an EORTC phase II study 182

Current concepts in diagnosis and treatment
Editor: U. Jonas

U. Jonas
Editorial 187

B. J. Schmitz-Dräger, G. Baur, Th. Ebert, G. Pfleiderer, R. Ackermann
Experience with a new solid phase enzyme immunoassay for prostatic acid phosphatase 189

K. Webb, J. Ware, D. F. Paulson
A review: prostate monoclonal antibodies – the magic bullet 193

D. P. De Klerk, C. Werely
Urinary glycosaminoglycan excretion in metastatic prostate cancer 200

P. J. Oljans, H. J. Tanke
Flow cytometric analysis of DNA content in bladder cancer: prognostic value of the DNA-index with respect to early tumour recurrence in G2 tumours 205

J. M. Fitzpatrick, A. B. West, M. R. Butler, V. Lane, J. D. O'Flynn
The role of adverse risk factors in response to Epodyl treatment in superficial bladder cancer 211

A. Stein, A. Lurie
Mucosal irritative changes due to ureterolithiasis associated with in situ and solid transitional cell carcinoma: report of a case 215

M. E. Osband, G. A. Carpinito, S. I. Levine, D. H. Hamilton, R. J. Krane
Successful adoptive immunotherapy of metastatic renal cell carcinoma with in vitro immunized autologous lymphocytes and cimetidine 217

D. J. Lightner, R. L. Vessella, R. K. Chiou, D. F. Palme, P. H. Lange
Immunotherapy for renal cell carcinoma: recent results 222

K. J. van Erpecum, C. W. Koch, B. Jones, J. H. van Bockel, L. C. Paul
Bladder content and residual urine in renal transplant patients: measurement using ultrasonography and relevance to urinary tract infection 228

H. J. Leisinger
Continent urinary diversion: review of the intussuscepted ileal valve 231

D. Hauri
A new operative technique in vasculogenic erectile impotence 237

G. Wagner, A. J. Wabrek, D. Dalgaard
Vaginal penetration pressure: a parameter in impotence diagnosis? 250

G. J. Neerhut, D. P. Griffith
Staging upper tract urinary calculi: analysis of an ESWL center's population 252

Free Papers

D. F. Paulson
Treatment of superficial carcinoma of the bladder 52

G. Bartsch, R. Heilbronner, M. Hurt, H. P. Rohr
Renaissance of an animal model for human benign prostatic hyperplasia using mice subjected to long-term treatment with estrogen 115

A. A. B. Lycklama à Nijeholt, E. Briët, U. Jonas
Coagulum pyelolithotomy: the determination of optimal conditions for clot formation 119

G. Kallistratos, V. Kalfakakou-Vadalouka, A. Evangelou, I. Mita
Sulfhydryl compounds in the treatment of cystinuria 122

Indexed in *Current Contents*

Author Index

Abrams, P., 2
Ackermann, R., 189
Andersen, J. T., 2

Bartsch, G., 63, 65, 100, 115, 163
Baur, G., 189
Berget, A., 38
Blaivas, J. G., 2
Blaustein, J., 16
Blom, J. H. M., 147
van Bockel, J. H., 228
Bogdanowicz, J., 153
Bonnesen, T., 32
Bono, A. V., 176, 182
Bosch, R. J. L. H., 141
Briët, E., 119
Butler, M. R., 211

Cardozo, L., 6
Carpentier, P. J., 159
Carpinito, G. A., 217
Chiou, R. K., 222
Constantinou, C. E., 10
Cooper, D., 6
Croles, J. J., 182

Dalgaard, D., 250
Deitch, A. D., 71

Ebert, Th., 189
Egender, G., 163

van Erpecum, K. J., 228
Evangelou, A., 122

Fitzpatrick, J. M., 92, 211
Folke, K., 38
Fosså, S. D., 182
Fowler, C. J., 2
Frimodt-Møller, C., 32, 38
Furtschegger, A., 163

Gallee, M. P. W., 136, 147
Gerstenberg, T., 2
Goldberg, S. D., 71
Gotwald, M., 65
Griffith, D. P., 252

Hald, T., 41
Hamilton, D. H., 217
Hauri, D., 237
Heilbronner, R., 115
Hetherington, J., 171
van der Heul, R. O., 147
Hurt, M., 115

Janež, J., 22, 24
Joebsis, A. C., 147
Jonas, U., 1, 119, 187
Jones, B., 228
Jones, W. G., 176, 182

Kalfakakou-Vadalouka, V., 122
Kallistratos, G., 122
ten Kate, F. J. W., 136, 147
Kaufman, D. G., 88
Kielmann, J., 32
De Klerk, D. P., 200
Koch, C. W., 228
Kramer, A. E. J. L., 27
Krane, R. J., 1, 217

Lane, V., 211
Lange, P. H., 222
Leijnse, B., 153
Leisinger, H. J., 231
Levine, S. J., 217
Lewis, E. L., 77
Lightner, D. J., 222
Lipshultz, L. I., 83
Lurie, A., 215
Lycklama à Nijeholt, A. A. B., 119
Lykkegaard Nielsen, E., 32

McClure, R. D., 105
Mita, J., 122
Mortensen, S., 32
Mouritsen, L., 38
Mundy, A. R., 45
Murphy, J. B., 83
Murray, K., 2

Nagler, H. M., 88
Neerhut, G. J., 252

Oefner, P. J., 65, 100
O'Flynn, J. D., 211
Oishi, K., 136
Okada, K., 136
Oljans, P. J., 205
Oosterom, R., 153
Orzeck, S., 16
Osband, E., 217
Ouslander, J., 16
Overstreet, J. W., 77

Palme, D. F., 222
Paul, L. C., 228
Paulson, D. F., 52, 193
de Pauw, M., 176, 182
Petersen, J. H., 38
Pfleiderer, G., 189
Pirker, E., 163
Plevnik, S., 22, 24
Prins, M. E. F., 147

Raz, S., 16
Robinson, M. R. G., 171
Rohr, H. P., 65, 115
Ryan, P. C., 92

Schachtner, W., 163
Scheiber, K., 65, 100
Schmassmann, A., 65
Schmitz, P. J. M., 147, 159
Schmitz-Dräger, B. J., 189
Schroeder, F. H., 127, 136, 141, 153, 159
Stanton, S. L., 2
Staskin, D., 16
Stein, A., 215
Stoter, G., 182
Studd, J., 6
Sylvester, R., 176, 182

Tanke, H. J., 205
Tršinar, B., 24

Venema, P. L., 27
Verbaeys, A., 176
Versi, E., 6
VerVoort, S. M., 83
Vessella, R. L., 222
Vodušek, D. B., 22, 24
Vrtačnik, P., 22, 24

Wagner, G., 250
Wabrek, A. J., 250
Ware, J., 193
Webb, K., 193
Werely, C., 200
West, A. B., 211
deVere White, R. W., 71

Yamabe, H., 136
Yoshida, O., 136